

What is claimed is:

1. A motor actuation device for actuating an actuated section by a motor, said motor having a rotary shaft to which a worm gear is fixed, a rotation of said worm gear is transmitted through a worm wheel to said actuated section, said motor actuation device comprising:
 - a first spur gear fixed to said rotary shaft of the motor;
 - an idle gear being meshed with said first spur gear;
 - a second spur gear being meshed with said idle gear;
 - 10 an impeller rotating with said second spur gear, said impeller has a plural of blades which are disposed at a same interval;
 - 15 a photo sensor for detecting said blade, said photo sensor generating a pulse to calculate an amount of the rotation of said rotary shaft of the motor.
2. A motor actuation device according to claim 1, wherein said first spur gear is integrally formed with said worm gear.
- 20 3. A motor actuation device according to claim 2, wherein a diameter of said first spur gear is smaller than that of said worm gear.
- 25 4. A motor actuation device according to claim 3, wherein said second spur gear is integrally formed with said impeller.
5. A motor actuation device according to claim 4, wherein said first spur gear and said second spur gear have a same number of teeth.
- 30 6. A motor actuation device according to claim 5, wherein

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said photo sensor is a photo interrupter.

7. A motor actuation device according to claim 6, wherein
a spur gear portion is integrally formed with said worm wheel,
5 a rotation caused by said motor is transmitted through said
spur gear portion to said actuated section.

10 8. A motor actuation device according to claim 7, wherein
a diameter of said spur gear portion is smaller than that of
said worm wheel.

9. A motor actuation device according to claim 8, wherein
said actuated section is a lens moving mechanism.